



Clearing The Air of Indoor Asthma Triggers

US EPA Indoor Environments Division

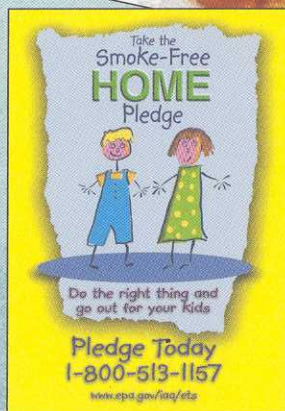
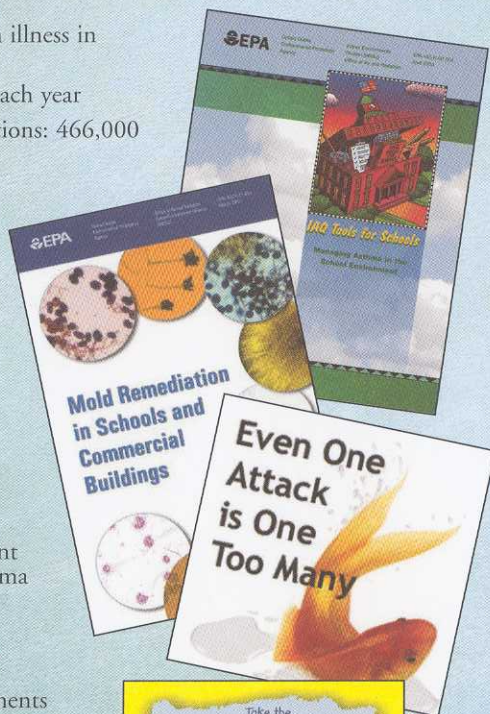
The Problem

Asthma is an epidemic in the United States with a disproportionate impact on children. There are approximately 15 million people with asthma in the U.S.

- Leading cause of long-term illness in children
- Deaths: more than 5,000 each year
- Asthma-related hospitalizations: 466,000 in 1994
- Emergency department visits: 1.9 million in 1995
- Healthcare costs: about \$11 billion a year
- 3 million lost workdays in the U.S.
- Indoor environmental pollutants are important asthma triggers and some are associated with initial onset of the disease
- Indoor environmental management is an important part of comprehensive asthma management plans

Finding a Solution

- U.S. EPA Indoor Environments Division (IED) has an aggressive multi-pronged program to combat asthma.
- Developed collaboratively with others in the field including National Institutes of Health (NIH) and Centers for Disease Control and Prevention (CDC)
- Focuses on preventing asthma symptoms by reducing people's exposure to indoor environmental triggers: secondhand smoke, dust mites, cockroaches, pet dander and mold



Program Components

- National Media Campaigns -English & Spanish
- Improving Environments in Schools
- Reducing Secondhand Smoke Exposure
- School and Childcare-Based Asthma Education
- In-Home Asthma Education
- Healthcare/Health Plan/Provider Education

The Science

- National Academy of Science's *Clearing the Air: Asthma and Indoor Air Exposures*
 - For a copy of the report released in 2000, go to <http://books.nap.edu/catalog/9610.html>

Conclusions

- The indoor environment plays an important role in the increasing asthma problem
- Biological agents have potential to affect sensitive asthmatics while chemical irritants have the potential to affect all asthmatics.
- Exposure to dust mites and secondhand smoke in children can cause asthma
- Exposure to dust mites, secondhand smoke, pets, cockroaches, and mold can exacerbate asthma symptoms
- Accepted Clinical Guidance
 - NAEPP's Guidelines on the Diagnosis and Management of Asthma (NIH)
 - To view the report, go to <http://www.nhlbi.nih.gov/guidelines/asthma/asthgdl.htm>

Resources

- Asthma Program
 - <http://www.epa.gov/iaq/asthma>
- IAQ Tools for Schools Program
 - <http://www.epa.gov/iaq/schools>
- Smoke-Free Home Initiative
 - <http://www.epa.gov/smokefree>
- EPA Publications
 - *Clear Your Home of Asthma Triggers*
 - *Asthma Speaker's Kit*
 - *Managing Asthma in the School Environment*
 - *Mold Remediation in Schools and Commercial Buildings*
- IAQINFO Hotline
 - 1-800-438-4318

Program Accomplishments

Asthma media campaign has received **\$72 M** of donated media time in the first year

More than **1,000,000** Smoke-free Home Pledge brochures requested

Nearly **10,000** schools nationwide implementing IAQ Tools for Schools Program

National competitive grants program to expand community based in-home asthma education interventions

Successful collaborations with Federal agencies and non-profit organizations